

**Notice of Allowability**

Application No.

09/750,507

Examiner

Albert T. Chou

Applicant(s)

LEE, BYOUNG HEON

Art Unit

2662

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to January 17, 2006.
2. ☒ The allowed claim(s) is/are 1, 2, 6, 7, 9-28, 31-45 and 47-53 (renumbered to 1-46 respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

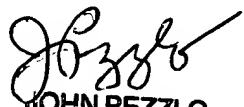
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
JOHN PEZZLO  
PRIMARY EXAMINER

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 1, 2, 6, 7, 9-28, 31-45 and 47-53 are allowed.

### ***Reasons for Allowance***

2. The following is an examiner's statement of reasons for allowance.

The prior art does not teach or fails to suggest the following:

"A traffic information collecting and providing system utilizing a PCS network, comprising:

- a PCS terminal for detecting and storing subscriber location information only once in each of a plurality of service areas having respective base transceiver stations, and transmitting the detected and stored subscriber location information to one of the base transceiver stations, wherein the base transceiver stations are installed on the roads of specific areas requiring traffic information and are capable of receiving location information from the PCS terminal;
- a PCS networking for transmitting the subscriber location information received from said one base transceiver station and detected by the PCS terminal; and
- a traffic information center for checking a traffic volume and congestion conditions by processing and statistically analyzing the subscriber location information transmitted through the PCS network, wherein the PCS

terminal does not transmit the subscriber location information until a predetermined number of times of detection is set according to a parameter value output from at least one of the base transceiver stations, and wherein said one base transceiver station is disposed at a service area through which the PCS terminal passes for a first time among the base transceiver stations”, as specified in independent claims 1 and 48.

“A traffic information collecting and providing method utilizing a PCS network, comprising:

outputting a control signal from at least one of a plurality of base transceiver stations installed on roads of specific areas requiring traffic information to a PCS terminal, which detects and stores subscriber location information only once in each of a plurality of service areas respectively including the base transceiver stations;

collecting the subscriber location information from the PCS terminal; transmitting the collected subscriber location information to a traffic information center; and processing the subscriber location information into a traffic information by statistically analyzing the subscriber location information by the traffic information center,

- wherein the control signal is a parameter value of controlling a number of times the PCS terminal detects the subscriber location information;
- wherein said at least one base transceiver station is one disposed at a service area through which the PCS terminal passes for a first time among the plurality of base transceiver stations;

Art Unit: 2662

- wherein the PCS terminal detects subscriber location information only once in each of the service areas including a respective one of the base transceiver stations;
- wherein processing location information into a traffic information comprising checking a traffic volume and congestion conditions of a specific interval", as specified in independent claims 7, 9, 11, 17, 49, 52 and 53.

"A method and a system for detecting vehicle network traffic, comprising:

- receiving location information from a mobile terminal;
- comparing a movement distance between measured intervals with respect to time when location information is measured;
- checking a traffic volume and congestion conditions of a specific interval by comparing the movement distance between measured intervals with a reference value;
- determining traffic conditions along a route based on the location information; and
- removing the corresponding location information, if the movement distance between measured intervals is smaller than the reference value", as specified in independent claims 19 and 34.

The closest prior art, either singularly or in combination, fails to anticipate or render the above limitations obvious.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - US Patent No. 6,078,651 to Den Hartong discloses "METHOD AND SYSEM FOR PROVIDING SERVICE TO TELECOMMUNICATION SUBSCRIBERS AT LOW TRAFFIC INTENSITY"
  - US Patent No. 6,104,931 to Havinis et al. disclose "SYSTEM AND METHOD FOR DEFINING LOCATION SERVICES"
  - US Patent No. 6,151,498 to Roel-Ng et al. disclose "SYSTEM AND METHOD FOR ROUTING POSITIOINING REQUESTS BASED ON MOBILE SWITCHING CENTER ADDRESS"
  - US Patent No. 6,091,952 to Xu et al. disclose "DISTRIBUTED SUBSCRIBER DATA MANAGEMENT IN WIRELESS NETWORKS FROM A CENTRAL PERSPECTIVE"
  - US Patent No. 5,943,621 to Ho et al. disclose "METHOD AND APPARATUS FOR TRACKING MOBILE STATIONS IN A WIRELESS COMMUNICATIONS SYSTEM"

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Albert T. Chou

January 30, 2006

AC

  
JOHN PEZZLO  
PRIMARY EXAMINER